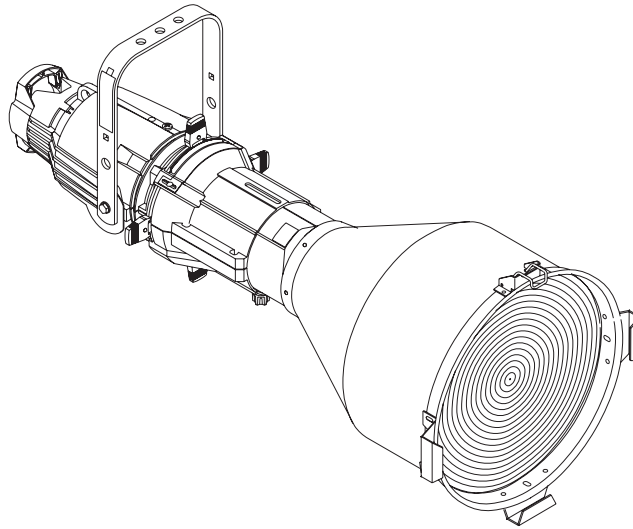




100V 115/120V 230/240V

Ellipsoidal Series



SPECIFICATIONS

PHYSICAL

- Rugged, die cast aluminum construction
- Rotating shutter assembly  $\pm 25^\circ$
- 20 gauge stainless steel shutters in a tri-plane assembly
- Interchangeable lens tubes with smooth-running teflon guides provide nine user-fit field angle options
- Thermally insulated rear handle
- High impact, thermally insulated knobs and shutter handles
- Two accessory slots and a top mounted, gel frame retainer
- Steel yoke with two mounting positions
- Positive locking single-clutch fixture body
- Slot for glass or stainless steel patterns
- Wide accessory slot with sliding cover for motorized pattern devices or optional iris
- UL and cUL Listed

ELECTRICAL

- 115-240V, 50/60Hz
- High temperature 3-conductor 36" leads in a glass fiber outer sleeve.
- Supports ETC Dimmer Doubling™ technology

LAMP

- 750W maximum
- HPL – compact tungsten filament contained in a krypton-filled quartz envelope (see table for suitable lamp types)
- Patented filament geometry provides extremely efficient light collection and transmission
- Integral die cast aluminum heat sink lamp base

SPECIFICATIONS

OPTICAL

- Re-optimized optical system for improved photometric performance and field uniformity
- Faceted borosilicate reflector with dichroic cold mirror coating removes greater than 90% infrared radiation (heat) and reflects greater than 95% of visible light
- Reflector secured with anti-vibration shock mounts
- Micro-groove plastic fresnel lens
- Lens(es) secured with anti-vibration shock mounts
- Tool free, positive locking X, Y and Z lamp centering adjustments, unaffected by relamping
- Beam edge continually adjustable hard-to-soft
- Interchangeable lens barrels permit selection of 5°, 10°, 14°, 19°, 26°, 36°, 50°, 70° and 90° field angles as well as 19°, 26°, 36°, and 50° EDLT lenses

ORDERING INFORMATION

Source Four

| MODEL | DESCRIPTION             |
|-------|-------------------------|
| 410   | 10° ellipsoidal (black) |
| 410-1 | 10° ellipsoidal (white) |

ETC Source Fours are supplied with C-clamp, color frame and 3' (96cm) leads as standard

Connector Designation

Use Suffixes below to specify Factory-Fitted Connector type

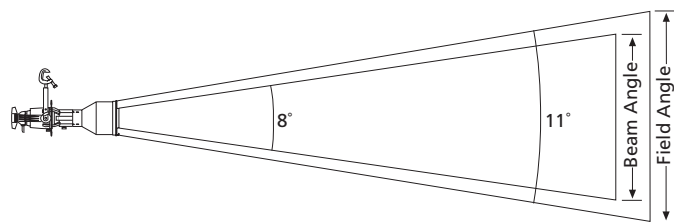
| MODEL | DESCRIPTION                            |
|-------|--|
| -A    | Parallel-blade U-ground connector      |
| -B    | Two-pin and ground, 20 amp connector   |
| -C    | Grounded, 20 amp, twistlock connector  |
| -M    | Dimmer Doubling Connector (NEMA L515P) |

See back page for Source Four Accessories



PHOTOMETRICS

Photometric data below is measured with an HPL 750W/115V 300 hr lamp. To convert data when using any other HPL lamp, use the lumen or candela multiplying factors (Lm MF or Cd MF) for that specific lamp, listed in the Lamps table in this datasheet. For lumen data, multiply by the Lm MF. For candela or footcandle data, multiply by the Cd MF.



|                           |              |               |               |               |
|---------------------------|--------------|---------------|---------------|---------------|
| <b>Throw Distance (d)</b> | 45'<br>13.7m | 70'<br>21.3m  | 100'<br>30.5m | 125'<br>38.1m |
| <b>Field Diameter</b>     | 8.5'<br>2.6m | 13.2'<br>4.0m | 18.9'<br>5.8m | 23.6'<br>7.2m |
| <b>Illuminance (fc)</b>   | 387          | 160           | 78            | 50            |
| <b>Illuminance (lux)</b>  | 4,164        | 1,721         | 843           | 540           |

Source Four 10°(cosine)

| Degree | Candela | Field Lumens | Beam Lumens | Efficiency | Lumens per watt |
|--------|---------|--------------|-------------|------------|-----------------|
| 10°    | 783,310 | 11,925       | 8,615       | 54.5%      | 15.9            |

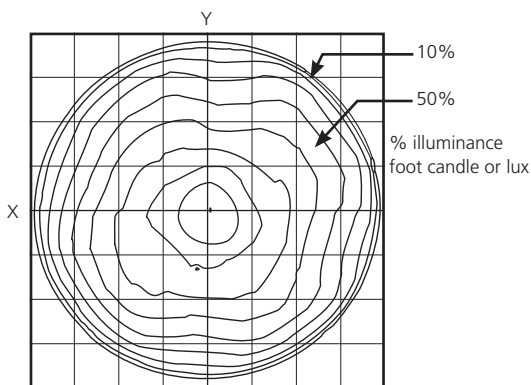
Metric Conversions: For Meters multiply feet by .3048  
For Lux multiply footcandles by 10.76

To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

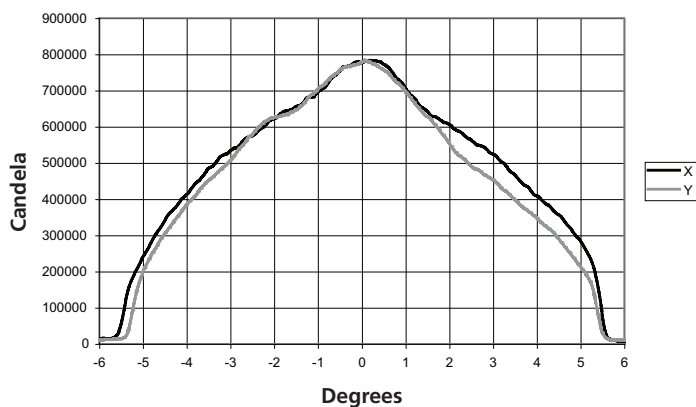
For Field diameter at any distance, multiply distance by .19

For Beam diameter at any distance, multiply distance by .14

Iso-Illuminance Diagram  
(Flat Surface Distribution)



Cosine Candela Plot



Complete IES photometry data files (LM-63-02 format) may be downloaded from the ETC website.

Go to <http://www.etcconnect.com/downloads.asp>

## Ellipsoidal Series

## L A M P S

To determine Candela (Cd) or Lumens (Lm) for any other HPL lamp, multiply the Candela or Lumen value by the appropriate multiplying factor (CdMF or LmMF) shown for that lamp in the table below.

| ETC Part # | Lamp Code     | Watts | Volts | Initial Lumens | Color Temp. K | Average Rated Life | 10° Cd MF | 10° Lm MF |
|------------|---------------|-------|-------|----------------|---------------|--------------------|-----------|-----------|
| RT116      | HPL 750/115** | 750   | 115   | 21,900         | 3,250         | 300                | 1.00      | 1.00      |
| RT196      | HPL 750/115X  | 750   | 115   | 16,400         | 3,050         | 1,500              | .64       | .74       |
| RT113      | HPL 575/115** | 575   | 115   | 16,520         | 3,250         | 300                | .86       | .82       |
| RT114      | HPL 575/115X  | 575   | 115   | 12,360         | 3,050         | 2,000              | .56       | .56       |
| RT142      | HPL 375/115   | 375   | 115   | 10,540         | 3,250         | 300                | .72       | .53       |
| RT143      | HPL 375/115X  | 375   | 115   | 8,500          | 3,050         | 1,000              | .50       | .40       |
| N/A        | HPL 750/120   | 750   | 120   | 21,900         | 3,250         | 300                | 1.00      | 1.00      |
| N/A        | HPL 750/120X  | 750   | 120   | 16,400         | 3,050         | 1,500              | .64       | .74       |
| RT115      | HPL 575/120   | 575   | 120   | 16,520         | 3,250         | 300                | .86       | .82       |
| RT171      | HPL 575/120X  | 575   | 120   | 12,360         | 3,050         | 2,000              | .56       | .56       |
|            |               |       |       |                |               |                    |           |           |
| RT112      | HPL 550/77*   | 550   | 77    | 16,170         | 3,250         | 300                | .87       | .81       |
| RT117      | HPL 550/77X*  | 550   | 77    | 12,160         | 3,050         | 2,000              | .59       | .56       |
|            |               |       |       |                |               |                    |           |           |
| RT160      | HPL 750/230** | 750   | 230   | 19,750         | 3,200         | 300                | .77       | .77       |
| N/A        | HPL 750/230X  | 750   | 230   | 15,600         | 3,050         | 1,500              | .48       | .61       |
| RT129      | HPL 575/230** | 575   | 230   | 14,900         | 3,200         | 400                | .65       | .63       |
| RT138      | HPL 575/230X  | 575   | 230   | 11,780         | 3,050         | 1,500              | .46       | .46       |
| RT154      | HPL 375/230X  | 375   | 230   | 7,800          | 3,050         | 1,000              | .36       | .33       |
| N/A        | HPL 750/240   | 750   | 240   | 19,750         | 3,200         | 300                | .77       | .77       |
| N/A        | HPL 750/240X  | 750   | 240   | 15,600         | 3,050         | 1,500              | .48       | .61       |
| RT130      | HPL 575/240   | 575   | 240   | 14,900         | 3,200         | 400                | .61       | .63       |
| RT139      | HPL 575/240X  | 575   | 240   | 11,780         | 3,050         | 1,500              | .43       | .46       |
| RT155      | HPL 375/240X  | 375   | 240   | 7,800          | 3,050         | 1,000              | .36       | .33       |

Source Four is rated for 750W maximum.

\*77 Volt HPL lamps are for use with ETC Dimmer Doubling technology only.

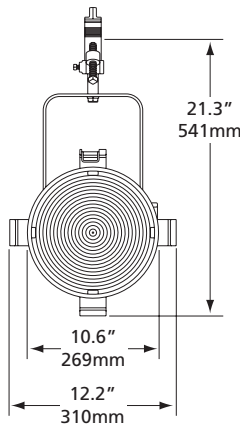
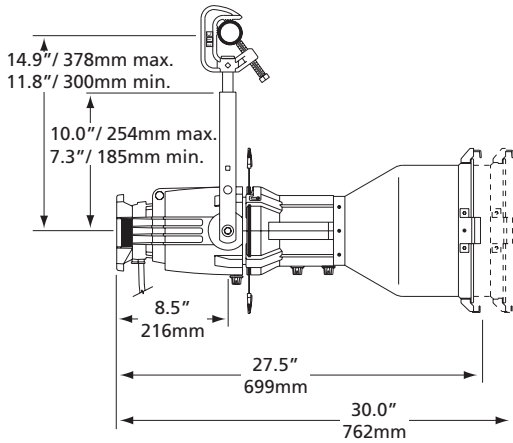
\*\*Photometric data was prepared using a production fixture and the Prometric CCD measurement system. Fixture adjusted for cosine distribution and tested with calibrated lamp at rated voltage. All data normalized to nominal lamp lumens in accordance with IES LM-73-04. Testing performed at ETC West, Hollywood, CA. All other multiplying factors extrapolated from primary test data.

For links to photometry file downloads (IES LM-63-02 format) go to [www.etconnect.com](http://www.etconnect.com).

HPL Specified Tolerances: Watts +/- 5%, Lumens +/- 7%, Average life +/- 10%, Color Temperature +/- 50K

Ellipsoidal Series

PHYSICAL



Source Four Weights\*

| MODEL | WEIGHT |     | SHIPPING WEIGHT |      |
|-------|--------|-----|-----------------|------|
|       | lbs    | kgs | lbs             | kgs  |
| 10°   | 15     | 6.8 | 24              | 10.9 |

\*Includes 2.3 lbs for C-clamp

ORDERING INFORMATION

Continued from front page...

Source Four Accessories

| MODEL   | DESCRIPTION                               |
|---------|---|
| 410LT   | 10° lens tube with lens installed (black) |
| 410LT-1 | 10° lens tube with lens installed (white) |
| 400CC   | C-clamp (included)                        |
| 400PH-A | Pattern holder (A size)                   |
| 400PH-B | Pattern holder (B size)                   |
| 400PH-G | Glass pattern holder                      |
| 400SC   | Safety cable                              |
| 400RS   | Drop-in iris                              |
| 410CF   | Colorframe for 10° (12") (included)       |
| 410DN   | Donut for 10° (12")                       |
| 410TH   | Top hat                                   |
| 410FB   | Source Four Fixture Body, Double Clutch   |

Note: For colors other than black or white, please call ETC.

Source Four products are protected by one or more of the following patents:

|         |   |
|---------|---|
| U.S.    | USRE36,3316, US5,345,371, US5,446,637, US5,544,029, US6,092,914 and US5,775,799 |
| U.K.    | GB0592589, GB0673488, 99930527.9*   |
| Germany | DE0592589, GB0673488, 99930527.9*   |
| Japan   | JP2,501,772   |

\* European patent application number



Corporate Headquarters • 3031 Pleasant View Rd, PO Box 620979, Middleton WI 53562 0979 USA • Tel +1 608 831 4116 • Fax +1 608 836 1736  
 London, UK • Unit 26-28, Victoria Industrial Estate, Victoria Road, London W3 6UU, UK • Tel +44 (0)20 8896 1000 • Fax +44 (0)20 8896 2000  
 Rome, IT • Via Ennio Quirino Visconti, 11, 00193 Rome, Italy • Tel +39 (06) 32 111 683 • Fax +39 (06) 32 656 990  
 Holzkirchen, DE • Ohmstrasse 3, 83607 Holzkirchen, Germany • Tel +49 (80 24) 47 00-0 • Fax +49 (80 24) 47 00-3 00  
 Hong Kong • Room 1801, 18/F, Tower 1 Phase 1, Enterprise Square, 9 Sheung Yuet Road, Kowloon Bay, Kowloon, Hong Kong • Tel +852 2799 1220 • Fax +852 2799 9325  
 Web • www.etcconnect.com • Copyright©2007 ETC. All Rights Reserved. All product information and specifications subject to change. 7060L1006 Rev. F Printed in USA 12/07